In the Claims

1. (currently amended) A solid of formula BiOI (BiOX); (BiOL)k wherein

X is Cl, Br, F or a mixture
$$(Br)_m(Cl)_n(F)_o \times \frac{1}{m+n+o}$$
.

L is CN, NC, NCO, NCS, O-Z, S-Z or a mixture of different moieties selected from CN, NC, NCO, NCS, O-Z and S-Z,

Z is COR₁, COOR₁, CONR₁R₂, CN, CSR₁, COSR₁, CSOR₁, SO₂R₁, SO₃R₁, R_1 , or C₆-C₂₄aryl or C₂-C₂₄heteroaryl each C₆-C₂₄aryl or C₂-C₂₄heteroaryl unsubstituted or mono- or poly-substituted by halogen, NO₂, CN, NR₃R₄, NR₃R₄R₅[†], NR₅COR₃, NR₅CONR₃R₄, R₃, OR₃, SR₃, CHO, CR₅OR₃OR₄, COR₃, SO₂R₃, SO₃⁻, SO₃R₃, SO₂NR₃R₄, COO⁻, COOR₃, CONR₃R₄, PO₃⁻, PO(OR₃)(OR₄), SiR₅R₆R₇, OSiR₅R₆R₇ and/or by SiOR₅OR₆OR₇;

j is a number from 0 to 4, k is a number from 0.005 to 3; m, n and o are each a number from 0 to 10⁶, but m, n and o are not all simultaneously 0;

 R_1 is C_3 - C_{24} alkyl, C_3 - C_{24} alkenyl, C_3 - C_{24} alkynyl, C_3 - C_{24} cycloalkyl, C_3 - C_{24} cycloalkenyl or C_2 - C_{12} heterocycloalkyl each unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_3R_4 , $NR_3R_4R_5^+$, NR_5COR_3 , $NR_5CONR_3R_4$, OR_3 , SR_3 , OBiO, SBiO, COO^- , COOH, $COOR_3$, CHO, $CR_5OR_3OR_4$, COR_3 , SO_2R_3 , SO_3^- , SO_3H , SO_3R_3 and/or by $OSiR_5R_6R_7$ or R_1 is C_6 - C_{24} aryl, C_7 - C_{24} aralkyl, C_8 - C_{24} aralkenyl or C_2 - C_{24} heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_3R_4 , $NR_3R_4R_5^+$, NR_5COR_3 , $NR_5CONR_3R_4$, R_3 , OR_3 , SR_3 , CHO, $CR_5OR_3OR_4$, COR_3 , SO_2R_3 , SO_3^- , SO_3R_3 , $SO_2NR_3R_4$, COO^- , $COOR_3$, $CONR_3R_4$, PO_3^- , $PO(OR_3)(OR_4)$, $SiR_5R_6R_7$, $OSiR_5R_6R_7$ and/or by $SiOR_5OR_6OR_7$;

 R_2 , independently of R_1 , is hydrogen or R_1 , wherein R_1 and R_2 may be linked to one another by means of a direct bond or a bridge -O-, -S- or $-NC_1-C_8$ alkyl– so that altogether a five- or six-membered ring is formed;

 R_3 and R_4 are each independently of the other hydrogen, CN, OR₅, COO⁻, COOH, COOR₅, CONR₅R₆, COR₅, SO₂R₅, SO₃⁻, SO₃H, SO₃R₅ or OSiR₅R₆R₇; or C₁-C₂₄alkyl, C₂-C₂₄alkenyl, C₂-C₂₄alkynyl, C₃-C₂₄cycloalkyl, C₃-C₂₄cycloalkenyl or C₂-C₁₂heterocycloalkyl each unsubstituted or mono- or polysubstituted by halogen, NO₂, CN, NR₅R₆, NR₅R₆R₇⁺, NR₅COR₇, NR₅CONR₆R₇, OR₅, SR₅, COO⁻, COOH, COOR₅, CHO, CR₅OR₆OR₇, COR₅, SO₂R₅, SO₃⁻, SO₃H, SO₃R₅ and/or by OSiR₅R₆R₇; or C₇-C₁₈aralkyl, C₆-C₁₄aryl or C₂-C₁₃heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO₂, CN, NR₅R₆, NR₅R₆R₇⁺, NR₅COR₆, NR₅CONR₆R₇, R₅, OR₅, SR₅, CHO, CR₅OR₆OR₇, COR₅, SO₂R₅, SO₃⁻, SO₂NR₅R₆, COO⁻, COOR₇, CONR₅R₆, PO₃⁻, PO(OR₅)(OR₆), SiR₅R₆R₇, OSiR₅R₆R₇ and/or by SiOR₅OR₆OR₇,

or NR₃R₄ is a five- or six-membered heterocycle which may optionally contain a further nitrogen or oxygen atom and which may be mono- or poly-substituted by C₁-C₈alkyl; and

 R_5 , R_6 and R_7 are each independently of the others hydrogen, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_2 - C_{20} alkynyl, C_7 - C_{18} aralkyl, C_6 - C_{14} aryl or C_2 - C_{13} heteroaryl, wherein R_5 and R_6 and/or R_6 and R_7 may be linked to one another by means of a direct bond or a bridge --O-, -S- or -NC₁-C₈alkyl- so that altogether a five- or six-membered ring is formed.

- **2.** (previously presented) A solid according to claim 1, wherein Z is CN, COR₁, SO₃R₁, R_1 or unsubstituted or substituted C_6 - C_{24} aryl; R_1 is unsubstituted or substituted C_3 - C_{24} alkyl, C_3 - C_{24} alkenyl, C_6 - C_{24} aryl or C_8 - C_{24} aralkenyl; R_3 and R_4 are each independently of the other hydrogen, CN, OR₅, COOR₅, CONR₅R₆ or COR₅, or unsubstituted or substituted C_1 - C_{24} alkyl, C_7 - C_{18} aralkyl or C_6 - C_{14} aryl; or NR₃R₄ is a five- or six-membered heterocycle which may optionally contain a further nitrogen or oxygen atom and which may be mono- or poly-substituted by C_1 - C_8 alkyl; R_5 , R_6 and R_7 are each independently of the others hydrogen, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_2 - C_{20} alkynyl or C_7 - C_{18} aralkyl, wherein R_5 and R_6 and/or R_6 and R_7 may be linked to one another by means of a direct bond or a bridge $-O_7$, $-S_7$ or $-NC_1$ - C_8 alkyl- so that altogether a five- or six-membered ring is formed; and R_5 , R_6 and R_7 themselves may be substituted.
- **3.** (original) A solid according to claim 2, wherein R_1 is C_6 - C_{24} aryl or C_8 - C_{24} aralkenyl each substituted by one, two or three radicals selected from the group consisting of OR_3 , NR_3R_4 and NO_2 .

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- **4.** (currently amended) A solid according to claim 1 which is <u>a solid solution</u> mainly or exclusively in the crystal lattice of bismuth <u>oxy</u>halide, wherein the two most intense reflections in the X-ray powder <u>diagram</u> are in the range from 27 to 32 20.
- **5.** (previously presented) A solid according to claim 1, wherein the sum j+k is from 0.1 to 3 and the ratio m:n is from 3:2 to 5:1.
- **6.** (currently amended) A process for the preparation of a bismuth oxyhalide by combining I and, optionally, X with a solution of BiO⁺ or Bi³⁺ ions in a solvent under conditions such that a solid which is insoluble in the solvent precipitates out, in which process L or LH is present in the solvent during precipitation of the solid, and the solid precipitating out is of formula BiOI·(BiOX)_j·(BiOL)_k, wherein j is a number from 0 to 4 and k is a number from 0.005 to 3

X is Cl, Br, F or a mixture $(Br)_m(Cl)_n(F)_o \times \frac{1}{m+n+o}$

L is CN, NC, NCO, NCS, O-Z, S-Z or a mixture of different moieties selected from CN, NC, NCO, NCS, O-Z and S-Z,

Z is COR_1 , $COOR_1$, $CONR_1R_2$, CN, CSR_1 , $COSR_1$, $CSOR_1$, SO_2R_1 , SO_3R_1 , R_1 , or C_6 - C_{24} aryl or C_2 - C_{24} heteroaryl each C_6 - C_{24} aryl or C_2 - C_{24} heteroaryl unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_3R_4 , $NR_3R_4R_5$, NR_5COR_3 , $NR_5CONR_3R_4$, R_3 , OR_3 , SR_3 , CHO, $CR_5OR_3OR_4$, COR_3 , SO_2R_3 , SO_3 , SO_3R_3 , $SO_2NR_3R_4$, COO, $COOR_3$, $CONR_3R_4$, PO_3 , $PO(OR_3)(OR_4)$, $SiR_5R_6R_7$, $OSiR_5R_6R_7$ and by $SiOR_5OR_6OR_7$.

m, n and o are each a number from 0 to 10⁶, but m, n and o are not all simultaneously 0;

 $\begin{array}{l} R_1 \text{ is } C_3\text{-}C_{24} \text{alkyl, } C_3\text{-}C_{24} \text{alkenyl, } C_3\text{-}C_{24} \text{alkynyl, } C_3\text{-}C_{24} \text{cycloalkyl, } C_3\text{-}C_{24} \text{cycloalkenyl or} \\ C_2\text{-}C_{12} \text{heterocycloalkyl each unsubstituted or mono- or poly-substituted by halogen, } NO_2, CN, NR_3R_4, \\ NR_3R_4R_5^{+}, NR_5COR_3, NR_5CONR_3R_4, OR_3, SR_3, OBiO, SBiO, COO^-, COOH, COOR_3, CHO, \\ CR_5OR_3OR_4, COR_3, SO_2R_3, SO_3^-, SO_3H, SO_3R_3 \text{ and/or by } OSiR_5R_6R_7 \text{ or } R_1 \text{ is } C_6\text{-}C_{24} \text{aryl,} \\ C_7\text{-}C_{24} \text{aralkyl, } C_8\text{-}C_{24} \text{aralkenyl or } C_2\text{-}C_24 \text{heteroaryl each unsubstituted or mono- or poly-substituted by } \\ \text{halogen, } NO_2, CN, NR_3R_4, NR_3R_4R_5^+, NR_5COR_3, NR_5CONR_3R_4, R_3, OR_3, SR_3, CHO, CR_5OR_3OR_4, } \end{array}$

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 COR_3 , SO_2R_3 , SO_3^- , SO_3R_3 , $SO_2NR_3R_4$, COO^- , $COOR_3$, $CONR_3R_4$, PO_3^- , $PO(OR_3)(OR_4)$, $SiR_5R_6R_7$, $OSiR_5R_6R_7$ and/or by $SiOR_5OR_6OR_7$;

 R_2 , independently of R_1 , is hydrogen or R_1 , wherein R_1 and R_2 may be linked to one another by means of a direct bond or a bridge $-O_-$, $-S_-$ or $-NC_1-C_8$ alkyl— so that altogether a five- or sixmembered ring is formed;

 R_3 and R_4 are each independently of the other hydrogen, CN, OR_5 , COO^- , COOH, $COOR_5$, $CONR_5R_6$, COR_5 , SO_2R_5 , SO_3^- , SO_3H , SO_3R_5 or $OSiR_5R_6R_7$; or C_1 - C_2 4alkyl, C_2 - C_2 4alkenyl, C_2 - C_2 4alkynyl, C_3 - C_2 4cycloalkyl, C_3 - C_2 4cycloalkenyl or C_2 - C_{12} heterocycloalkyl each unsubstituted or mono- or polysubstituted by halogen, NO_2 , CN, NR_5R_6 , $NR_5R_6R_7^+$, NR_5COR_7 , $NR_5CONR_6R_7$, OR_5 , SR_5 , COO^- , COOH, $COOR_5$, CHO, $CR_5OR_6OR_7$, COR_5 , SO_2R_5 , SO_3^- , SO_3H , SO_3R_5 and/or by $OSiR_5R_6R_7$; or C_7 - C_{18} aralkyl, C_6 - C_{14} aryl or C_2 - C_{13} heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_5R_6 , $NR_5R_6R_7^+$, NR_5COR_6 , $NR_5CONR_6R_7$, R_5 , OR_5 , SR_5 , CHO, $CR_5OR_6OR_7$, COR_5 , SO_2R_5 , SO_3^- , $SO_2NR_5R_6$, COO^- , $COOR_7$, $CONR_5R_6$, PO_3^- , $PO(OR_5)(OR_6)$, $SiR_5R_6R_7$, $OSiR_5R_6R_7$ and/or by $SiOR_5OR_6OR_7$.

or NR₃R₄ is a five- or six-membered heterocycle which may optionally contain a further nitrogen or oxygen atom and which may be mono- or poly-substituted by C₁-C₈alkyl; and

 R_5 , R_6 and R_7 are each independently of the others hydrogen, C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, C_2 - C_{20} alkynyl, C_7 - C_{18} aralkyl, C_6 - C_{14} aryl or C_2 - C_{13} heteroaryl, wherein R_5 and R_6 and/or R_6 and R_7 may be linked to one another by means of a direct bond or a bridge --O-, -S- or -NC₁- C_8 alkyl- so that altogether a five- or six-membered ring is formed.

- 7. (original) A process according to claim 6, wherein the precipitation is carried out at a pH of from 1 to 9.
- **8.** (currently amended) Platelets having a length of from 2 μm to 5 mm, a width of from 2 μm to 2 mm and a thickness of from 50 nm to 1.5 μm, the ratio of length to height being at least 5:1, the ratio of width to height being at least 3:1, and the ratio of length to width being at most 5:1, which platelets are coated with a solid of formula BiOI·(BiOX)_j·(BiOL)_k according to claim 1. , wherein j is a number from 0 to 4 and k is a number from 0.005 to 3.

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- **9.** (previously presented) Platelets according to claim 8, coated with from 1 to 1000 % by weight, based on the uncoated platelets, of solid of formula BiOI (BiOX)_i (BiOL)_k.
- **10.** (currently amended) A process for the coating of particles with bismuth oxyhalide by combining I and, optionally, X with a solution of BiO⁺ or Bi³⁺ ions in a solvent under conditions such that a solid which is insoluble in the solvent precipitates out, in which process L or LH is present in the solvent during precipitation of the solid, and the particles are coated with a solid of formula BiOI·(BiOX)_j·(BiOL)_k, wherein j is a number from 0 to 4 and k is a number from 0.005 to 3 $\frac{X \text{ is Cl, Br, F or a mixture}_{-}(Br)_m(Cl)_n(F)_o \times \frac{1}{m+n+o} \text{ in the solid}_{-}$

L is CN, NC, NCO, NCS, O-Z, S-Z or a mixture of different moieties selected from CN, NC, NCO, NCS, O-Z and S-Z,

Z is COR_1 , $COOR_1$, $CONR_1R_2$, CN, CSR_1 , $COSR_1$, $CSOR_1$, SO_2R_1 , SO_3R_1 , R_1 , or C_6 - C_{24} aryl or C_2 - C_{24} heteroaryl each C_6 - C_{24} aryl or C_2 - C_{24} heteroaryl unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_3R_4 , $NR_3R_4R_5$, NR_5COR_3 , $NR_5CONR_3R_4$, R_3 , OR_3 , SR_3 , CHO, $CR_5OR_3OR_4$, COR_3 , SO_2R_3 , SO_3 , $SO_$

m, n and o are each a number from 0 to 10⁶, but m, n and o are not all simultaneously 0;

 $\begin{array}{l} R_1 \text{ is } C_3\text{-}C_{24}\text{alkyl}, \ C_3\text{-}C_{24}\text{alkenyl}, \ C_3\text{-}C_{24}\text{alkynyl}, \ C_3\text{-}C_{24}\text{cycloalkyl}, \ C_3\text{-}C_{24}\text{cycloalkenyl} \ or \\ C_2\text{-}C_{12}\text{heterocycloalkyl} \text{ each unsubstituted or mono- or poly-substituted by halogen, } NO_2, \ CN_1, \ NR_3R_4, \ NR_3R_4R_5^+, \ NR_5\text{COR}_3, \ NR_5\text{CONR}_3R_4, \ OR_3, \ SR_3, \ OBiO, \ SBiO, \ COO^-, \ COOH, \ COOR_3, \ CHO, \ CR_5OR_3OR_4, \ COR_3, \ SO_2R_3, \ SO_3^-, \ SO_3H, \ SO_3R_3, \ and/or \ by \ OSiR_5R_6R_7 \ or \ R_1 \ is \ C_6\text{-}C_{24}\text{aryl}, \ C_7\text{-}C_{24}\text{aralkyl}, \ C_8\text{-}C_{24}\text{aralkenyl} \ or \ C_2\text{-}C_{24}\text{heteroaryl} \ each \ unsubstituted \ or \ mono- or \ poly-substituted \ by \ halogen, \ NO_2, \ CN_1, \ NR_3R_4, \ NR_3R_4R_5^+, \ NR_5COR_3, \ NR_5CONR_3R_4, \ R_3, \ OR_3, \ SR_3, \ CHO_1, \ CR_5OR_3OR_4, \ COR_3, \ SO_2R_3, \ SO_3^-, \ SO_3R_3, \ SO_2NR_3R_4, \ COO^-, \ COOR_3, \ CONR_3R_4, \ PO_3^-, \ PO(OR_3)(OR_4), \ SiR_5R_6R_7, \ OSiR_5R_6R_7, \ and/or \ by \ SiOR_5OR_6OR_7; \ \ \end{array}$

 R_2 , independently of R_1 , is hydrogen or R_1 , wherein R_1 and R_2 may be linked to one another by means of a direct bond or a bridge $-O_-$, $-S_-$ or $-NC_1-C_8$ alkyl- so that altogether a five- or sixmembered ring is formed;

 R_3 and R_4 are each independently of the other hydrogen, CN, OR_5 , COO^- , COOH, $COOR_5$, $CONR_5R_6$, COR_5 , SO_2R_5 , SO_3^- , SO_3H , SO_3R_5 or $OSiR_5R_6R_7$; or C_1 - C_{24} alkyl, C_2 - C_{24} alkenyl, C_2 - C_{24} alkynyl, C_3 - C_{24} cycloalkyl, C_3 - C_{24} cycloalkenyl or C_2 - C_{12} heterocycloalkyl each unsubstituted or mono- or polysubstituted by halogen, NO_2 , CN, NR_5R_6 , $NR_5R_6R_7^+$, NR_5COR_7 , $NR_5CONR_6R_7$, OR_5 , SR_5 , COO^- , COOH, $COOR_5$, CHO, $CR_5OR_6OR_7$, COR_5 , SO_2R_5 , SO_3^- , SO_3H , SO_3R_5 and/or by $OSiR_5R_6R_7$; or C_7 - C_{18} aralkyl, C_6 - C_{14} aryl or C_2 - C_{13} heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2 , CN, NR_5R_6 , $NR_5R_6R_7^+$, NR_5COR_6 , $NR_5CONR_6R_7$, R_5 , OR_5 , SR_5 , CHO, $CR_5OR_6OR_7$, COR_5 , SO_2R_5 , SO_3^- , $SO_2NR_5R_6$, COO^- , $COOR_7$, $CONR_5R_6$, PO_3^- , $PO(OR_5)(OR_6)$, $SiR_5R_6R_7$, $OSiR_5R_6R_7$ and/or by $SiOR_5OR_6OR_7$,

or NR₃R₄ is a five- or six-membered heterocycle which may optionally contain a further nitrogen or oxygen atom and which may be mono- or poly-substituted by C₁-C₈alkyl; and

R₅, R₆ and R₇ are each independently of the others hydrogen, C₁-C₂₀alkyl, C₂-C₂₀alkenyl, C₂-C₂₀alkynyl, C₇-C₁₈aralkyl, C₆-C₁₄aryl or C₂-C₁₃heteroaryl, wherein R₅ and R₆ and/or R₆ and R₇ may be linked to one another by means of a direct bond or a bridge --O-, -S- or -NC₁-C₈alkyl- so that altogether a five- or six-membered ring is formed.

- **11.** (original) A process according to claim 10, wherein the particles are in suspension in the solvent during precipitation of the solid.
- **12.** (original) A process according to claim 11, wherein the coating is carried out subsequently to preparation of the particles without intermediate isolation.
- **13.** (previously presented) A substance composition comprising a solid according to claim 1, and also at least one further white, black, coloured or effect pigment.
- **14.** (currently amended) A substance composition comprising a high molecular weight an organic material having a molecular weight of at least 10³ g/mol and from 0.01 to 80 % by weight, based on the high molecular weight organic material, of a solid according to claim 1.

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- **15.** (previously presented) A solid according to claim 1, wherein j is a number from 0.5 to 1.2, and k is a number from from 0.05 to 2.
- **16.** (previously presented) A solid according to claim 1, wherein n is from 0 to 10⁴ and o is from 0 to 10²:
- **17.** (previously presented) A process according to claim 6, wherein j is a number from 0.5 to 1.2 and k is a number from 0.05 to 2.
- **18.** (previously presented) platelets according to claim 8, wherein j is a number from 0.5 to 1.2, and k is a number from 0.05 to 2.
- **19.** (**previously presented**) A substance composition comprising platelets according to claim 8 and also at least one further white, black, coloured or effect pigment.
- **20.** (currently amended) A substance composition comprising a high molecular weight an organic material having a molecular weight of at least 10³ g/mol and from 0.01 to 80 % by weight, based on the high molecular weight organic material, of platelets according to claim 8.

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